

Appln No. 10/602,298  
Amdt date July 18, 2005  
Reply to Office action of June 2, 2005

**REMARKS/ARGUMENTS**

Applicants thank the Examiner for his careful consideration of this application as well as the time devoted to the Interview granted after the final Office action. In response to the above-identified final Office Action and the Interview teleconference with the Examiner, Applicants amend the application and seek reconsideration and allowance thereof.

In this response, Applicants do not add any claims. Applicants cancel claim 6 and amend claims 1 and 12. Accordingly, claims 1-5 and 7-23 are pending in the application. Applicants note that the amendments to claims 1 and 12 incorporate language from claim 6 and thus Applicants believe that no new issue has been raised requiring further search and request that the amendments be entered.

**I. Interview Summary**

Applicants' attorney, conducted an Interview teleconference with the Examiner after the receipt of the final Office action, mailed June 2, 2005. In the Interview that took place on July 6, 2005, Applicants' attorney sought clarification of the rejection of claim 6, which was rejected as anticipated by U.S. Patent No. 6,375,364 issued to Wu. Specifically, clarification was requested as to how Wu taught "the ridge structure protrudes beyond an edge of the junction surface." The Examiner agreed that the ridge structure of Wu was at most flush with the surface of the junction and did not protrude past the surface of the junction. However, The Examiner stated that further review would be needed to determine if Wu could be properly

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modified or combined with another reference to render the elements of claim 6 obvious. Based on this discussion, Applicants have amended claims 1 and 12 to incorporate this element of claim 6 and note that independent claim 23 also contains this element. No agreement was made regarding the allowability of any claim or claim language.

## II. Claims Rejected Under 35 U.S.C. § 102

Claims 1, 2, 6-8 and 10-23 stand rejected under 35 U.S.C. § 102 as allegedly being anticipated by U.S. Patent No. 6,375,364 issued to Wu (hereinafter, "Wu"). Applicants respectfully request that the rejection be withdrawn for at least the following reasons.

In order to establish a *prima facie* case of anticipation, the Examiner must show that the cited reference teaches each of the elements of the claim. In regard to independent claims 1, 12 and 23, each of these claims includes the element "the ridge structure protruding beyond the junction surface." As discussed above, the Examiner has acknowledged that Wu does not teach this element. Thus, Wu does not teach each of the elements of the independent claims 1, 12 and 23. Therefore, Wu does not anticipate claims 1, 12 and 23. Accordingly, reconsideration and withdrawal of the anticipation rejection of these claims are requested.

In regard to claims 2, 7, 8, 10, 11 and 13-22, these claims depend, respectively, from independent claims 1, 12 and 23 and incorporate the limitations thereof in addition to other limitations in each of these claims, which together further

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patentably distinguish them over the cited references. Thus, at least for the reasons mentioned above in regard to independent claims 1, 12 and 23, these claims are not anticipated by Wu. Accordingly, reconsideration and withdrawal of the anticipation rejection of these claims are requested.

### III. Claims Rejected Under 35 U.S.C. § 103

In order to establish a *prima facie* case of obviousness, the Examiner must show that the cited references teach or suggest each of the elements of the claim. In addition, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art." See MPEP § 2143.03.

In regard to independent claims 1, 12 and 23, as discussed above, the Examiner has admitted that Wu does not teach "the ridge structure protruding beyond the junction surface" as recited in these claims. The Examiner has not indicated and the Applicants have been unable to discern any part of Wu that teaches or suggest a process whereby a structure with a ridge that protrudes beyond the surface of the junction would be formed or the desirability of such a structure. Thus, Wu does not teach or suggest such a modification and claims 1, 12 and 23, as well as their dependent claims, are not obvious over Wu.

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Claims 3-5 and 23 stand rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Wu in view of U.S. Patent No. 6,574,379 issued to Miyazaki (hereinafter "Miyazaki"). Applicants respectfully request that the Examiner withdraw this rejection of the claims.

In regard to claims 3-5, these claims depend from independent claim 1, either directly or indirectly, and incorporate the limitations thereof in addition to other limitations in each of these claims, which together further patentably distinguish them over the cited references. In regard to claim 23, the Examiner appears to have inadvertently rejected this claim as anticipated by Wu, as discussed above. Thus, at least for the reasons mentioned above in regard to independent claims 1 and 23, Wu does not teach or suggest each of the elements of claims 1 and 23. Miyazaki does not appear to correct these defects of Wu. The Examiner has not relied on Miyazaki to teach these elements and the Applicants have been unable to discern any part of Miyazaki that teaches these elements of claims 3-5 and 23. Accordingly, reconsideration and withdrawal of the obviousness rejection of these claims are requested.

Claim 9 stands rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Wu in view of U.S. Patent Application Publication No. 2004/0155254 of Cai et al. (hereinafter "Cai").

In regard to claim 9, this claim depends from independent claim 1, either directly or indirectly, and incorporates the limitations thereof in addition to other limitations in the claim, which together further patentably distinguish the claim

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over the cited references. Thus, at least for the reasons mentioned above in regard to independent claim 1, this claim is not taught or suggested by Wu. Namely, Wu does not teach or suggest "the ridge structure protruding beyond the junction surface." The Examiner does not rely on Cai for teaching this element of claim 1 and the Applicant have been unable to discern any part of Cai that teaches or suggests this element. Therefore, Wu in view of Cai does not teach or suggest each of the elements of claim 9. Accordingly, reconsideration and withdrawal of the obviousness rejection of this claim are requested.

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Conclusion

In view of the foregoing, it is believed that all claims now pending, namely claims 1-5 and 7-23, patentably define the subject invention over the prior art of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (626) 795-9900.

Respectfully submitted,  
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